

A TREATISE ON GOOD SAWS

SAW SENSE



ATKINS

*Silver Steel*

SAWS

# ATKINS

## STATEMENT OF

# *Quality*

GENUINE ATKINS SILVER STEEL SAWS are manufactured with the utmost care to insure quality of material and workmanship. *Every saw* is thoroughly inspected before shipment. Any saw proving unsatisfactory as to either workmanship or material should be returned DIRECT TO OUR FACTORY at Indianapolis for inspection and adjustment of complaint. Dealers are not authorized to adjust complaints or make replacements.



*If you have any difficulty in getting any SILVER STEEL saw that you wish from your dealer, let us know and we will personally see that you are taken care of promptly.*



To make certain that you get a genuine ATKINS SILVER STEEL SAW look for the "AAA" trade mark and Company signature etched on the blade.

# E. C. ATKINS AND COMPANY

# The Saw



## The Most Important Tool in the Carpenter's Kit . . .

ATKINS SILVER STEEL SAWS have marked an epoch in the development of the saw. They are made of the very finest material, constructed on exclusive principles and are instantly appreciated by lovers of fine tools.

SILVER STEEL is the invention of Mr. E. C. Atkins, the founder of E. C. Atkins and Company. He realized that good mechanics would appreciate the value and quality of finer steel.

SILVER STEEL is manufactured under a special formula for E. C. Atkins and Company. Only virgin ore, combined with the finest ingredients is used, resulting in a steel equal to the finest razor steel.

No saw is a genuine SILVER STEEL SAW unless the name SILVER STEEL is plainly etched on the blade.

### THE TEMPER

All ATKINS SILVER STEEL SAWS are tempered by gas. The degree of temper for each blade is prescribed by the metallurgist and controlled in the tempering room by mechanical devices which insure absolute uniformity. This eliminates the old-fashioned "rule of the thumb" variations and produces a blade hard and tough without being brittle. An ATKINS SILVER STEEL SAW wears evenly throughout the entire blade. This means it will retain its cutting edge longer than any other, enabling you to file the saw easier and keep each tooth uniform.

### THE SMITHING

The smithing of a hand saw is the process which enables the blade to run true. It is not apparent to the naked eye and for this reason is omitted from many saws. In the Atkins plant, smithing is considered one of the most important features in the manufacture of

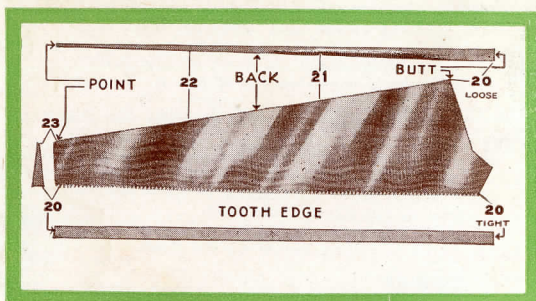
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saws and only the most skilled and experienced workmen are employed for this work.

## THE GRINDING

ATKINS SILVER STEEL SAWS are taper ground from the tooth edge, which is the thickest part throughout the entire blade to the point on the back. The blade resembles an inverted wedge. The kerf cut by the teeth is wide enough to permit the balance of the blade to drop easily into the cut without an excessive set and with no possibility of bending or buckling.

There is a distinction between ATKINS TAPER GRINDING and the so-called thin back saw of other makes, which is ground an even thickness along the tooth edge and simply dubbed off thinner at the back. ATKINS SILVER STEEL SAWS ARE GRADUALLY TAPERED THROUGHOUT THE BLADE



FROM THE THICKEST TOWARD THE THINNEST POINT. This is another exclusive ATKINS feature and is found only in ATKINS SILVER STEEL SAWS.

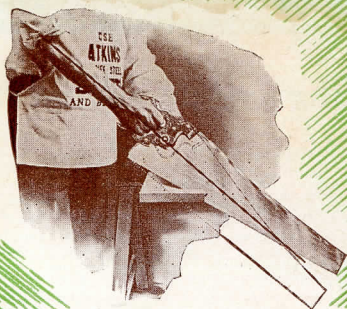
## THE HANDLE

We make two styles of handles—the ATKINS IMPROVED PERFECTION PATTERN and the old style, straight across shape. The difference is apparent in the illustration shown, which shows a Perfection Handle on a saw, and a skeleton outline of how the same saw would hang with an old style handle.

The dotted lines represent the position in which the saw blade is operated using the old style handle. The position of the handle throws the blade downward so the point of greatest energy is directed against the back of the saw. This forces the operator to exert a down-







ward pressure with his wrist to secure proper cutting force.

With the Perfection Handle (indicated by the solid lines) the point of greatest energy is directed immediately upon the cutting teeth. This eliminates wrist strain and makes every ounce of pressure count.

**IMPORTANT**—We make the old style handles when preferred and furnish them regularly on certain numbers of hand saws.

## THE FINISH

ATKINS SILVER STEEL SAWS are easily distinguished by the beauty and fineness of their finish. The famous Damaskeen and mirror finishes are used only on Atkins Saws. Each saw is packed in a moisture-proof bag and marked on the blade for easy identification.

## HOW TO TEST AN ATKINS SAW

Hold the saw at arm's length, bending the blade slightly to bring the points of the teeth into view along the breast of the blade. The points should all show the same length. The breast should be slightly crowning—about  $\frac{1}{8}$ " in 30". Now hold the saw so that you can look from the back along the flat side of the blade in order to examine the set. This should be uniform on both sides to perform smooth, accurate work. The setting should not extend more than one-half the length of the tooth and never should be carried beyond the base of the tooth into the blade.

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# ATKINS HAND, RIP

## "The Four Hundred"

This is the Atkins hand saw masterpiece . . . the unchallenged leader of all saws. It is made for master carpenters and embodies every quality necessary to make it "The Finest on Earth."

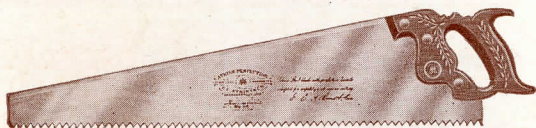
Straight back genuine SILVER STEEL blade, mirror polish, 5 gauges taper ground, 3 nickel screws and one medallion, and thoroughly tempered to insure uniform toughness, Rosewood Perfection pattern handle.



THE 401—STRAIGHT BACK—SHIP POINT

No. 400—Identical to 401 except skew back. Ship point saws made 26" length only. Regular pattern lengths, 24", 26".

## ATKINS SILVER STEEL SAWS



No. 65—SHIP POINT

Known and used wherever hand sawing is done. Carpenters appreciate ease to wrist and forearm effected by the Perfection handle. Straight back. SILVER STEEL taper ground. Ship point made in 26" length only. Regular pattern lengths, 20", 22", 24", 26".

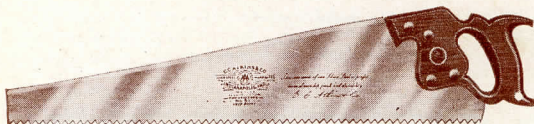
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# AND PANEL SAWS



**No. 53—SHIP POINT**

Here is the most popular hand saw on the market for general carpentry work. The Perfection pattern (non-wrist strain) handle is attractively carved. Skew back, SILVER STEEL taper ground. This saw is in constant demand by the most critical mechanics. Ship point made 26" only. Regular pattern lengths, 20", 22", 24", 26".



**No. 51—SHIP POINT**

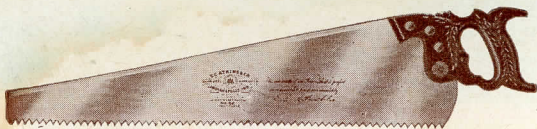
Our leading straight-across handle pattern saw and a favorite with experienced carpenters. Skew back, SILVER STEEL taper ground, ribbon edge. Ship point made in 26" lengths only. Regular pattern lengths, 20", 22", 24", 26".



**No. 54—SHIP POINT**

A good hand saw made to sell for less than other SILVER STEEL saws. Seasoned beech straight across handle. Regular and ship point. Ship point only in 26" length. Regular pattern lengths, 20", 22", 24", 26".

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No. 64—SHIP POINT

A time-tested, full-width extra heavy blade saw particularly adapted for fast, accurate work. SILVER STEEL taper. Straight across applewood handle. Regular and ship point. Ship point 26" only. Regular pattern, 24", 26".



No. 72—SHIP POINT

The original ship point pattern. One of our most popular light weight hand saws. SILVER STEEL taper ground. Carved applewood straight across handle. Made only in 26" ship point.

## A NEW IDEA IN HAND SAWS



No. 2000—SHIP POINT

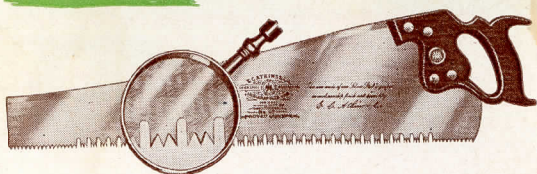
A modern saw. Uniform tempered genuine SILVER STEEL, which assures unusual edge holding qualities and permits a lighter, stiff, taper ground blade.

New applewood handle with Perfection hang is closer to blade and gravity center of saw, thus making sawing less effort. Made in 22" and 26" only.

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# ATKINS SPECIAL SAWS



## No. 93—IMPROVED UNIVERSAL SKEW BACK

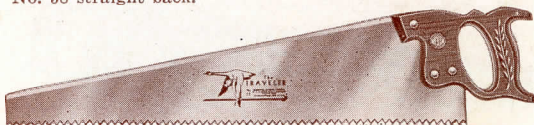
SILVER STEEL SAW for heavy framing, concrete forms, ship building, car repairing, etc. Special patented tooth, extra large gullet and raker tooth, will cross cut and rip. Short section of hand teeth for starting cut. Damaskeen polish, ribbon edge. Taper ground, needs little set. Lacquered and polished apple handle, filed and set. 26" only.



## No. 59—RELIABLE SHIP POINT

A moderately priced skew back saw for general use. New style easy-grip handle. Ribbed edge. Regular and ship point. Ship point made 26" only. Regular pattern lengths, 18", 20", 22", 24", 26".

No. 58 straight back.



## No. S-3

Special grade steel, tempered, flat ground polished and etched. Beech handle, coffee stained, lacquered. Carved on grip, 3 nickeled screws and one medalion in 26" length, other lengths 3 nickeled screws only. Filed and set. Made in 20", 22", 24" and 26" lengths.

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# ATKINS SPECIAL SAWS



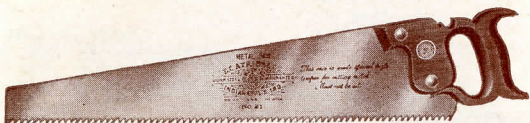
No. S-4

Special quality steel, tempered and taper ground, 2 gauges, polished and etched. Beech handle, cherry stain, lacquered. Full carved on grip. Three nickeled screws, 1 medallion. Filed and set. Made in 26" length only.



No. S-5

Special steel, tempered, 3 gauges, taper ground, polished and etched. Fully carved beech handle, brown stain, lacquered. Four nickeled screws and medallion. Filed and set. No. S-5½ same as No. S-5 except straight back. Made in 18", 20", 22", 24" and 26" lengths.



No. 21

No. 21 Metal Cutting saw is made of SILVER STEEL. It will easily cut all ordinary sheet metal. The teeth are especially milled, straight across, but are tempered for slow filing. Seasoned hardwood handle, fully lacquered. No. 22 is identical with the exception of the handle, which is adjustable. Lengths, 18", 20", 22", 24", 26".

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## THE JUNIOR MECHANIC

This saw is for the boy of the house. It also meets many requirements for general household and home workshop use. Made in one size only, 20" long, 9 points, skew and straight back. The blade is taper ground, highly polished, and made of Atkins high grade special steel. The handle is of beech, coffee stained, and has 2 nickel screws and medallion. This is an ideal saw to start a boy on the interesting home workshop hobby.



### No. 3 NEST OF SAWS

The ideal nest of saws, an 18-inch nail-cutting blade, 12-inch keyhole blade and 14-inch compass blade. When nails or other metals are encountered you simply cut the metal with the nail blade, and proceed with hand saw. Adjustable handle. SILVER STEEL. Thin back.

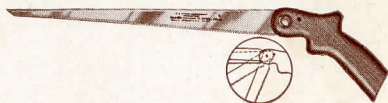


### No. 7 NEST OF SAWS

No. 7 SILVER STEEL consists of a 12-inch keyhole, 14-inch compass, 16-inch pruning blades and an interchangeable handle. Thoroughly hardened and tempered and each blade is properly toothed, filed and set for the purpose. Blades are slotted as shown for attaching to handle. Interchangeable beech handle, of the new utility grip pattern. Palm shaped grip, rounded edges assures comfort. Large or small hands can have full control of the saw at all times without strain. One nicked screw and wing nut.

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# ATKINS SPECIAL



**No. 16—COMPASS SAW**

No. 16 is a new style adjustable pistol grip Compass Saw with several new features. SILVER STEEL Blade, uniformly tempered. 17 x 18 gauge, and polished, 8 point filed and set. Butt end notched to give four different angles, see illustration; three with teeth below handle, one with teeth on line with top permits sawing in extra tight corners. The new design beech handle permits large hands full and comfortable strain-free grip. Blade held by stationary pin and nicked wing nut and bolt.



**No. 11—ADJUSTABLE COMPASS SAW**

A versatile compass saw for general use. Blade is notched to fit into applewood handle, which may be adjusted to cut at various angles. Made in lengths from 10" to 16". Eight-point SILVER STEEL, thin back.



**No. 6—KEYHOLE SAW**

The finest keyhole saw made. SILVER STEEL adapts itself admirably to this class of cutting. The 10-point blade is tough, which causes it to hold its cutting edge, resist breakage. Lengths, 10", 12".

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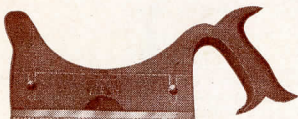


# SILVER STEEL SAWS



**No. 3—BACK SAW**

Special hardened and tempered steel, 8" to 14", 21 gauge; 14" to 18", 20 gauge. Beech handle. Filed and set. Carefully made and inspected. Lengths, 8", 10", 12", 14", 16", and 18".



**No. 27—STAIR BUILDERS SAW**

A SILVER STEEL saw designed for sawing into flat surfaces an even depth. Adjustable to cut any depth up to  $\frac{3}{4}$ ". Natural beech frame. Made in 8" length.



**No. 1—MITRE BOX SAW**

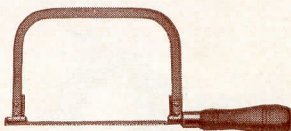
No. 1 SILVER STEEL thoroughly hardened and tempered, carefully ground, polished and etched, all sizes 11 points to the inch. 20" to 26" about 20 gauge, 28" up about 19 gauge flat ground. The back is extra heavy bright spring steel. Clamped tight to hold the blade rigid. Beech handle fully lacquered. Two nicked screws and 1 medallion. Will fit all standard mitre boxes. Filed and set.

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### No. 100—FLOORING SAW

Made to eliminate boring and chiseling when sawing into flat surfaces. Blades toothed both edges of point to reach out-of-the-way spots. Made of 10-point SILVER STEEL; hardwood handle, 18" length only.



### No. 50—COPING SAW

No. 50 frame of cold rolled steel, rounded edges,  $\frac{3}{8}$ " wide,  $\frac{3}{16}$ " thick;  $7\frac{1}{4} \times 4\frac{5}{8}$ " deep; nicked and buffed. Lacquered hardwood handle is fastened to frame by threaded cold rolled steel ferrule. Pinned end blades  $6\frac{5}{8}$ "  $\times$   $\frac{1}{8}$ ", 18 teeth per inch are held secure by slotted cap screws. Adjusted to cutting curves or sharp angles and tightening blade quickly made by turning handle.



### No. 25—DOVETAIL SAW

No. 25 SILVER STEEL fine tooth for light smooth sawing where a back saw is not suited. Rigid bright spring steel back. Filed and set. Comfortable beech handle, lacquered. Nickel-plated ferrule. Many of these saws are used in cabinet and pattern shops and schools. Made in 6", 8", 10" and 12".

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# ATKINS SPECIALTIES

## No. 6—SPOKE SHAVE

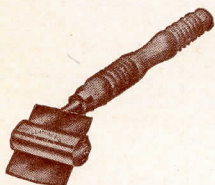
SILVER STEEL blade, 2 1/16" x 1 3/4", tempered and ground 19 gauge. One beveled edge.

Malleable frame with hand holds 1" wide, rounded and knurled. Other parts crucible steel. Knurled screw holds blade tight. Ten inches long over all. Packed 1 in a box.



## No. 3—PERFECTION SCRAPER

Special scraper steel blade, 16 ga., 2 15/16" x 2 15/16", adapted to cut on all four sides. Hardwood handle. Metal parts enameled.



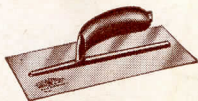
## No. 0—SCRAPER BLADE

SILVER STEEL in 18, 19 or 20 gauge. Holds turned edge a long time. Individually packed in waxpaper package. 18 different sizes.



## No. 15—FEATHERWEIGHT TROWEL

Aluminum mounting. SILVER STEEL blade holds parallel edge. 10" to 12" lengths; 4 1/2" and 4 3/4" widths, 23 x 25 ga. Curved handle. No. 16 same except handle is slightly tapered. Send for Trowel Catalog.



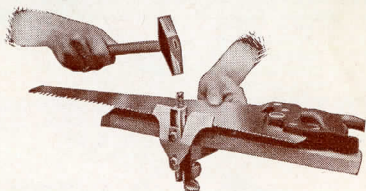
## No. 1—MORFLOAT

Replaces carpet or felt floats. Particularly suited for sand work. Perfectly balanced aluminum handle. Wedge keys for instant replacement of sponge rubber base. 8 1/4" x 3 3/4" x 3/4" only.



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**AAA SAW SET—No. 5**

This set is regulated by moving the guide on the front up or down. This prevents breaking the saw teeth, assures an absolutely uniform set and prevents setting the teeth too far down on the blade.

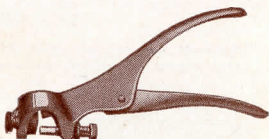


**PISTOL GRIP SAW SET—No. 432**

Graduated anvil setting for 5 to 11 point saws. Teeth always in plain view. Plunger and anvil made of high grade tool steel.

**SAW SET—No. 395**

A dandy set. Revolving anvil with indicator dial. Revolving anvil gives the required bevel and length of all saw teeth from 4 to 16 to the inch. Tempered steel spring.



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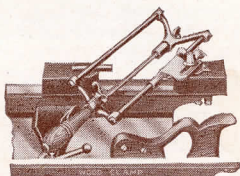


# Saw Tools

## AAA HAND SAW JOINTER—No. 15



The AAA hand saw jointer is essential to every saw kit for filing hand, rip and panel saws. Use of this tool adds to the saw's efficiency by making the teeth uniform in length. Simple to operate.



## HAND SAW FILER—No. 8

Hand saw filer is most perfect tool ever designed for the purpose. The most inexperienced boy can file a saw correctly, bringing each tooth to the same bevel and pitch. It can be used with wood clamp in any ordinary vise or iron saw clamp. Nothing to get out of order. Packed individually.

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# ATKINS SILVER STEEL, SOLID FOR PORTABLE AND

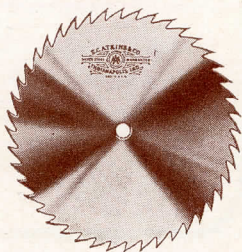


No. 37—MITRE SAW

The most popular smooth-cutting circular saw made. It rips, crosscuts or mitres equally well. Dual grinding assures fast, smooth cutting up to 15 board feet. Cuts so smoothly that glue joints can be made without sanding. Especially recommended for fast, high-speed motor driven machines with a speed of 3,600 R.P.M. Stocked in diameters from 6" to 18".

No. 44—COMBINATION SAW

An all-purpose SILVER STEEL circular saw recommended for fast cutting in a wide variety of work. It will rip, crosscut or mitre and requires very little power to operate because of scientific construction and perfect tooth shape. Stocked in diameters from 6" to 18".



# TOOTH, CIRCULAR SAWS

## BENCH MACHINES

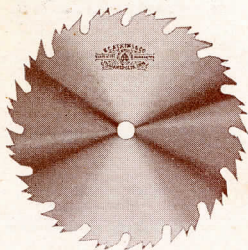
### No. 2—RIP SAW

Designed especially for ripping. Flat ground, SILVER STEEL. Standard sizes for all portable bench machines. According to size, they are filed and set or swaged ready for use. Stocked in diameters 6" to 34".



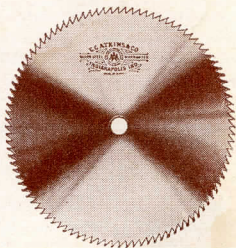
### No. 27— COMBINATION SAW

A popular fast cutting combination tooth circular saw. Rips, crosscuts and mitres. Made of SILVER STEEL proper temper; flat ground. Furnished filed and set ready for use. Stocked in diameters 8" to 18".



### No. 8—CUT-OFF SAW

Invaluable for cut-off work. Designed for cutting across the grain. Available in all sizes for portable and bench machines. Fine quality SILVER STEEL saw. Furnished filed and set ready for use. Made in 6" to 34" diameters.



# How TO FILE AND SET HAND, RIP AND PANEL SAWS



Fig. 1

Bottom view, showing correctly fitted hand saw.



Fig. 2

Side view of properly filed and set hand saw. Note bevel on front of teeth.



Fig. 3

Top view of correctly fitted hand saw. Notice that set is slightly wider than thickness of blade, eliminating chances of saw binding in cut.

By examining the teeth of your saw you can readily tell if they are uniform. If they are uneven, it is necessary to "joint" and correctly shape them. See Jointing, page 21.

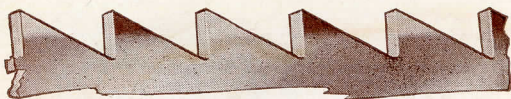


Fig. 4

Bottom view, showing properly fitted rip saw.

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**Fig. 5**

Enlarged section of rip saw correctly filed and set. Notice there is no bevel on front of teeth. They are filed straight across.



**Fig. 6**

View looking down on the back of a rip saw blade. Notice the set extends slightly wider than the thickest part of the blade. If the teeth are an even size and shaped correctly as in Fig. 6, they will not require "jointing." In this case refer to directions for "Setting Saw Teeth" on page 24.

## JOINTING

Unevenness of teeth is caused by normal wear, cutting nails, dropping the saw and through carelessness. Treating a saw with care adds longer life.



**Uneven Hand Saw Teeth**



**Uneven Rip Teeth**

**Fig. 7**

Notice, in Fig. 7, how uneven the teeth are in both cross cut and rip saws. This shows the condition of some saw teeth before jointing. It is always good practice to use a jointing tool to hold a file square with the blade. (See jointer and clamp in Fig. 8. This saw is ready for the jointing operation.)

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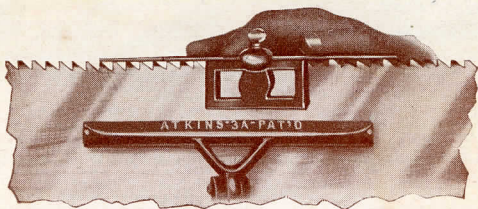
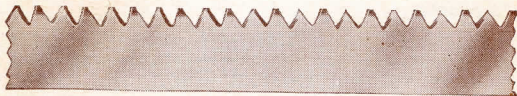


Fig. 8

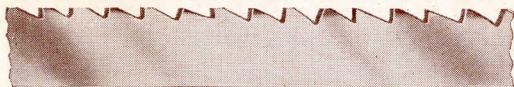
Jointing means filing the teeth tops to make them an even height.

Place the saw in the clamp as in Fig. 8 and file tops of teeth until the file lightly touches the shortest tooth. The teeth will then look like Fig. 9.



#### Hand Jointed

Enlarged view of saw teeth jointed down evenly, showing flat tops of the teeth.



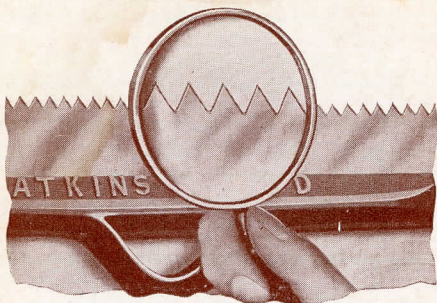
#### Rip Jointed

Illustration of saw teeth after jointing; showing flat tops and the uneven gullets of the teeth.

Fig. 9

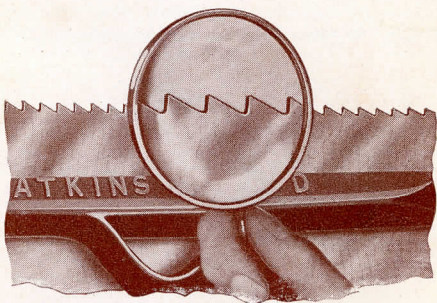
It is necessary that all teeth be uniform size, shape and hook. After jointing, shape teeth for crosscut hand saw as in Fig. 10. For rip saws shape teeth as in Fig. 11.

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**Fig. 10**

The above illustration shows a section of a cross-cut hand saw with teeth properly jointed and shaped, ready for setting. Teeth are not beveled for cross cutting.



**Fig. 11**

This illustration shows a section of a rip saw jointed and shaped, ready for setting. Teeth are shaped to a point for ripping.

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To properly shape the teeth before setting, place file in bottom of gullet and file straight down into the blade until the finished side is up to a point and the flat top of the next tooth on the other side of the file is divided in two. Continue to the next gullet, finishing one tooth to a point and dividing the next as before until the entire blade is finished. If the teeth are unevenly spaced as in Fig. 9, bear in heavily against the tooth having the largest top until you reach the center of the next flap top. Always hold your file square and level.

## SETTING SAW TEETH

Saw teeth, whether crosscut or rip, to keep from binding in the wood should be bent outward alternately from  $3/1000''$  to  $5/1000''$ . Saws that are straight, level and properly ground for clearance need very little set. This is true of Atkins SILVER STEEL Saws. Do not set the teeth too low down on the tooth. Setting should not be deeper than two-thirds the distance from the point to the gullet. For skilled mechanics who can use a hammer we recommend it as better in every respect; but the ordinary mechanic who does not often file a saw should use a saw set especially designed for this work as the Atkins No. 395 Lever Saw Set shown in Fig. 12.

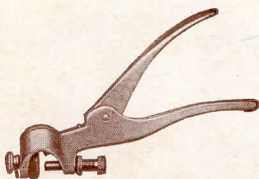


Fig. 12

### ATKINS No. 395 LEVER SAW SET

Whether you use a hammer or saw set your finished saw should look like Fig. 13 for cross-cutting or like Fig. 14 for ripping.

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Fig. 13

The above illustration shows crosscut teeth set, ready to file. Notice the teeth are even, properly shaped and set. Inspect the illustration carefully and note the teeth are set about two-thirds of the distance from point to gullet. Generally, crosscut saws are tools made up of a series of "sharp knives" arranged to sever the fibres of wood across the grain as shown in Fig. 15 on page 26.

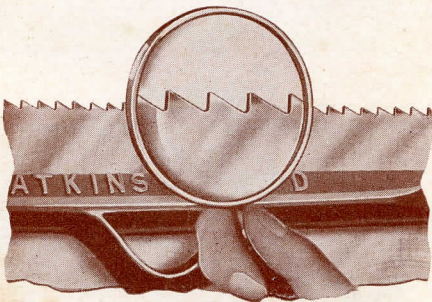
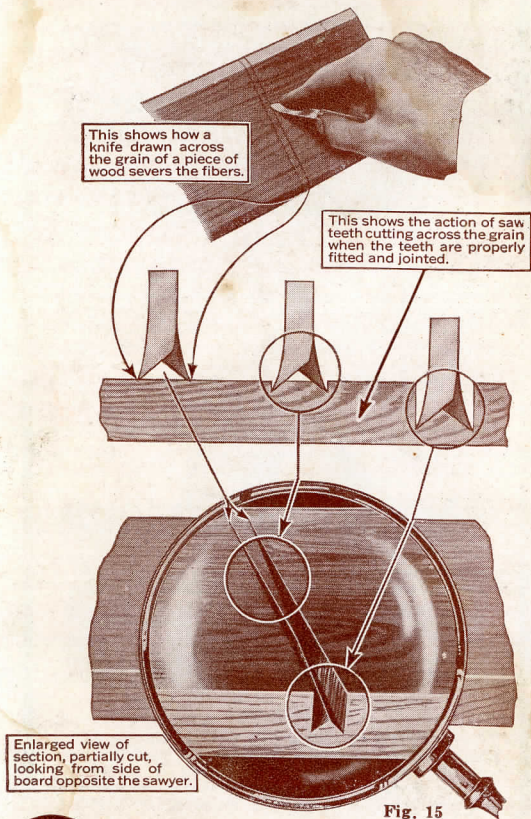


Fig. 14

This illustration shows rip saw teeth, ready to finish. After jointing, shaping and setting a rip saw, the pitch in the teeth should be as shown above. With the saw teeth properly jointed and set, you are now ready for finishing or pointing and beveling.

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# The Cutting Action of Properly Fitted Saw Teeth



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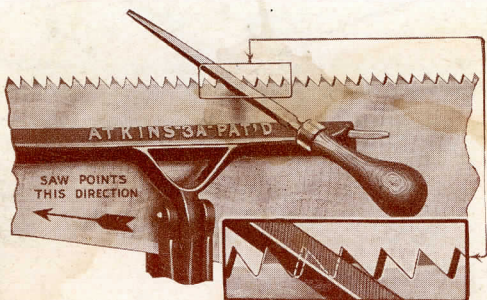


Fig. 16

## HOW TO FILE HAND SAWS

Fig. 16 shows a section of crosscut hand saw teeth filed properly. It also shows correct file position. To file a crosscut hand saw, place the saw in a vise with the handle to the right. The vise should grip the saw from  $\frac{1}{8}$ " to  $\frac{1}{4}$ " below teeth. Before starting to bevel, pass a fine file very lightly over the tops of the teeth to make what is called a "shiner" or bright top. This will be useful as a guide for finishing each tooth. The position of passing the file should be as shown in Fig. 16. Starting in the first gullet left of the first tooth set away from you with your file in the position shown in Fig. 16. Hold the file level and push, at an angle, evenly across the saw, bringing each tooth to a point and leaving a trifle of the "shiner" on the tooth to the right of your file.

Duplicate this process in EVERY OTHER gullet straight through to the handle.

When you have reached the handle, reverse your saw in the clamp, handle to the left, as shown in Fig. 17. Then proceed in exactly the same manner as before only start with the first gullet to the RIGHT of the first tooth set away from you. File each tooth to a sharp point.

When your saw is finished it should look like Figs. 1, 2, and 3 on page 20, which show top, side and bottom views of correctly filed crosscut hand saws. For

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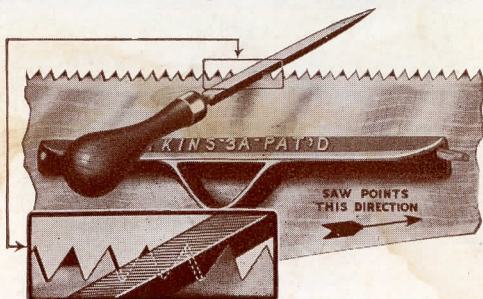


Fig. 17

best results we recommend these Atkins SILVER STEEL Files:

- 5 pt. Crosscut Teeth—6" or 7" Slim Taper File
- 6-7 pt. Crosscut Teeth—6" or 7" Slim Taper File
- 8-9 pt. Crosscut Teeth—7" Extra Slim Taper File
- 10-11 pt. Crosscut Teeth—4", 4½", 5", 5½" Extra Slim Taper File

## HOW TO FILE RIP SAWS

Rip saws are filed in the same manner as crosscut saws except there is no bevel to the tooth of a rip saw. The file is held straight across the teeth at right angles to the blade and no bevel should be left on the teeth. Rip saws act as chisels, not knives, therefore need no beveling. A correctly filed rip saw should look like Figs. 4, 5 and 6 on pages 20 and 21.

Atkins SILVER STEEL Files for filing rip saws are:

- 4 and 4½ pt. 7" Slim Taper File
- 5 and 5½ pt. 7" Slim Taper File
- 6 and 6½ pt. 6" or 7" Slim Taper File

If these directions are carefully followed, there is no reason why the youngest apprentice should have trouble caring for his most valuable tool—the saw. Don't overlook the most minute attention to your saw. Too many fine tools are ruined by carelessness. Always treat saws and other tools with care.

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# ATKINS SILVER STEEL FILES

There is an Atkins SILVER STEEL file for every purpose. They can be depended upon to do fast, smooth filing. Look for the name ATKINS before you buy.

## BAND SAW TAPERS



**Regular Pattern** files are made in lengths 6 and 8 inches.

**Slim Pattern** files are confined to 6 and 8-inch lengths.

## BAND SAW BLUNT FILES



**Regular Pattern** Band Saw Blunt files are made in the following lengths: 6 and 8 inches.

**Slim Pattern** files are 6 and 8-inch lengths only.

## IMPROVED DIAMOND POINT



The Improved Diamond Point file furnished by E. C. Atkins and Company is adapted for such machines as the Wardwell-Foley, Black Diamond and other automatic band saw filing machines.

These files are made in two lengths, 6-inch and 7-inch. There are 11 sizes of 6-inch files from  $\frac{1}{4}$ " to  $\frac{3}{4}$ " wide. The 7-inch has 10 sizes from  $\frac{21}{64}$ " to  $\frac{3}{4}$ ".

## SPECIAL HAND SAW FILES



Atkins Hand Saw Special files made in lengths:  $5\frac{1}{2}$ ", 7" and 8". The 8" length is made  $\frac{3}{16}$ ",  $\frac{1}{4}$ " or  $\frac{5}{16}$ " face as desired.

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# HOW TO SHARPEN CIRCULAR SAWS

This is a delicate saw and, like all fine tools, should be used only for the purpose intended. Every operation is inspected and the saw is thoroughly tested by experts to insure perfection. These fitting instructions, if followed carefully, will be the means of avoiding much trouble usually incurred with small circular saws.

## Putting Saw on Mandrel:

Point teeth toward operator as in cutting. Saw should fit mandrel snugly and must not wobble in cut or turn on the shaft. Belt should also be snug. Slipping belts cause loss of power.

Before starting, rotate by hand to see that it clears table.

## TYPES OF CIRCULAR SAWS



Fig. 1

Rip Saws: For cutting with the grain.



Fig. 2

Crosscut Saws For cutting across the grain.



Fig. 3

Combination Saws: For cutting with or across the grain and mitering.

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For the best cutting angle, adjust table up or down so that the saw just cuts through the material.

Be sure you have enough speed and power. Never overload the motor. The small motors furnished for small bench machines usually run 1750 R. P. M. and are belted to operate saw at 3500 R. P. M. or more. Never attempt to adjust saw table while saw is running.

Stand at one side while operating, never back of material to be cut. Hold the work down with one hand and push through with the other. When gauge is close to the saw use a stick notched on one end to push work through. Do not crowd the saw. If it binds cut off the power and check to see if saw has proper set and is filed sharp.

## FITTING WORK-AT-HOME CIRCULAR SAWS

Remember this saw, as any other, must be sharp at all times to do the best work.

**Jointing:** Be sure all teeth are the same length and saw is absolutely round. Run saw up to speed of machine and joint with an old emery wheel or whetstone as shown in Fig. 4, touching the teeth lightly as the saw revolves.

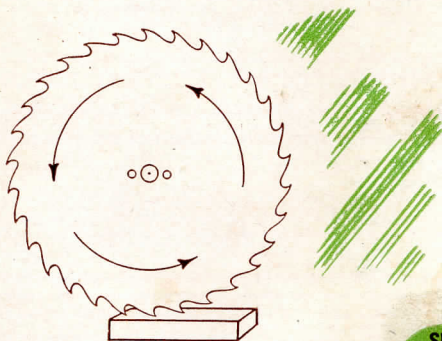


Fig. 4

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**Filing:** In refitting these saws one must be careful to follow original shape of tooth, and gullets must be kept round and uniform.

**Rip Saws** should be filed square faced and with bevel on back of tooth only.

**Crosscut Saws** should be filed with a bevel on front and back of tooth.

**Combination Saws** are filed the same as crosscut saws on the fine teeth—the rakers should be filed square faced and kept below the top of the cutting teeth about  $1/64"$ .

**Gullets:** All gullets must be round; sharp or square gullets cause saws to crack.

**Set:** The set must be uniform; that is, the depth of the set in each tooth must be the same and not too near the bottom of the gullet. The amount of set should be the same on each tooth; about  $1/64"$  on each side of the saw is proper.

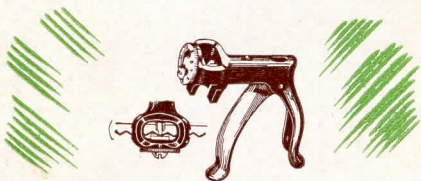


Fig. 5

Fig. 5. Atkins No. 432 Lever Saw Set will easily and accurately set any small circular saws, also hand, rip and panel saws, as used in home workshops.

## FILES

Atkins SILVER STEEL Files are the best for filing saws and are accepted everywhere. For fine tooth rip saws up to 10" diameter, use 7" and 10" Cant Saw Files. For fine tooth crosscut saws up to 10" in diameter, use 5" to 8"

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Slim Taper Files. For combination or mitre saws, use 7" to 10" Cant Saw Safe Back Lightning Files.

## HOW TO SHARPEN DADO HEADS and CUTTERS

### 4-inch Size.

The teeth on the outside and inside cutters should be assembled, in fitting, the same as when new, so that all will be the same diameter. The teeth of outside cutters must be set alternately. Give both the outside cutters and inside cutters a light set to prevent irregularity in the bottom of the cut. To assure an even diameter, joint all the pieces in the head in position on the mandrel.

### 5½-inch Size.

The teeth on the outside and inside cutters should be assembled the same as when new, so that all will be the same diameter. Each of the three sections of the outside cutters have two cutting teeth and one raker. File so that the points of the cutting teeth will be 1/64 inch longer than the raker. Give the inside cutters only a light set to prevent irregularity in the bottom of the cut. To assure an even diameter, joint all the pieces in the head in position on the mandrel.

## HOW TO SHARPEN NARROW BAND SAWS

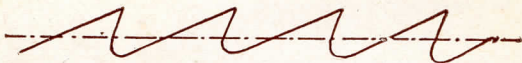
A fairly accurate rule to follow regarding the thickness of the saw is:—allow 1/1000 of an inch in saw thickness for each inch in the diameter of the wheels. Saws heavier than that are apt to be bent beyond the elastic limit of the steel. This action in time results in fatigue



and breakage. As all narrow band saws are toothed after tempering there is danger of starting a check in the gullet unless the toothing punch is sharp and fits the die correctly.

In filing the saw, thoroughly clean out the bottom of the gullet and present fresh steel at each sharpening. Always use a file with round corners that cuts.

In filing narrow band saws, file straight across keeping the front of the tooth square. The teeth must be the same length. Band saws are usually used to make irregular shapes, so the saw should have set enough to cut a sufficiently wide path to enable the operator to follow the turns without twisting the blade. Do not set the teeth more than half way down on the tooth. The right way to set the saw is to keep the line of the set parallel with the back.



This method keeps the sawdust in front of the teeth so it can be drawn out of the cut.

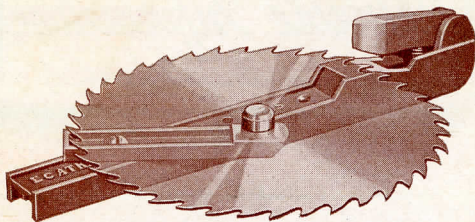
Keep the saw sharp and well strained on the wheels. Keep it tight. Setting into the body of the saw will stretch the toothed edge unduly and cause the blade to run snaky, vibrate, cut rough stock and crack.

Narrow band saws are usually operated with a back guide. Keep this guide operating freely so that the saw will not rub and case harden on the back. Keep the gum cleaned off the sides of the teeth to prevent friction, heat and cracks.

When you increase the speed of your machine you should decrease the number of points per inch; in other words, use a coarser tooth blade.

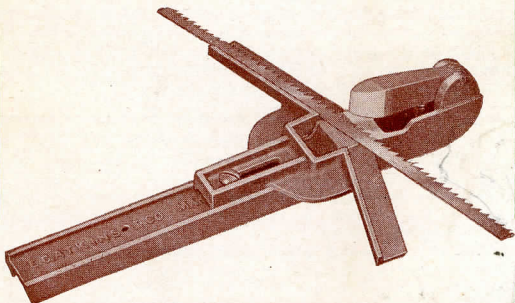
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## ATKINS No. 3 WORK-AT-HOME CIRCULAR AND BAND SAW SET



**For setting Rip Saws; also sets cut-off saws.**

Set is a malleable iron casting with hardened tool steel hammer and anvil designed to uniformly set rip and cut-off saws 3 inches to 10 inches in diameter, with  $\frac{1}{2}$  inch,  $\frac{5}{8}$  inch and  $\frac{3}{4}$  inch holes (not recommended for larger saws). Will set circular saws with any hook. One bushing included, either a  $\frac{5}{8}$  inch or  $\frac{3}{4}$  inch hole (size optional).



**Guide in place for setting Narrow Band Saws.**

The malleable iron Band Saw Guide is interchangeable on the same base. It is easily attached. Accurately sets band saws  $\frac{3}{16}$  inch to 1 inch wide. Base has a countersunk hole for fastening to a bench or can be clamped in a vise. Be sure to fasten set solidly to obtain the best results.

Lacquered blue. Packed 1 base, 1 circular bracket, 1 band saw guide, 1 bushing.

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# Valuable Information

FOR THE EVERYDAY CARPENTER

## ROOF FRAMING

### 1. A Simple Method for Getting Lengths of Hips and Jacks for Any Pitch Roof

Draft the half of one end of building to scale with the base of the triangle equal to  $\frac{1}{2}$  of the building, at one end erect a perpendicular equal to the length of common rafter, then the line joining the extremities of the legs (hypotenuse) is equal to the length of the hip for that particular building.

The jacks may be found by spacing off the building so that you have the required number of jacks. There will always be one more space than jacks. Then divide the length of the common rafter by the number of spaces and this quotient will be the length of the shortest jack. Double this for the second, treble for the third and so on.

### 2. Other Rules for Finding Lengths of Common Rafters

I. For one-quarter pitch roof, multiply the width of building by the decimal .56—example: 12 feet equal  $W \times .56$  equal 6.72 feet or 6 feet 9 inches.

II. For one-third pitch roof, multiply width of building by the decimal .6—example: 12  $W \times .6$  equal 7.20 or 7 feet  $2\frac{1}{2}$  inches.

III. For one-half pitch roof, multiply the width of building by the decimal .71—example: 12  $W \times .71$  equal 8.52 or 8 feet 6 inches.

IV. For one full pitch, multiply the width of building by the decimal 1.12—example: 12  $W \times 1.12$  equal 13.44 or 13 feet  $5\frac{1}{2}$  inches.

### Another Method for Finding Lengths of Rafters

Take the number of inches the roof is to rise to the foot on the tongue and one foot on the blade, which is the rise and run of one foot, then apply the square to the timber as many times as the number of feet in half the width of building. This gives you the exact length

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of the rafters, also the line of the tongue gives you the plumb-cut, and the line of the blade gives the seat cut.

### Table for Finding the Length and Side Cuts of Jack Rafters

1. One-quarter pitch roof.  
 13.5 in. shorter when spaced 12 in. on center.  
 18 in. shorter when spaced 16 in. on center.  
 27 in. shorter when spaced 24 in. on center.  
 12 and 13.5 gives the side cuts for jacks in this pitch; the plumb-cuts and seat-cuts are the same as the common rafters for this pitch.
2. One-third pitch roof.  
 14.4 in. shorter when spaced 12 in. on center.  
 19.2 in. shorter when spaced 16 in. on center.  
 28.8 in. shorter when spaced 24 in. on center.  
 12 and 14.4 gives the side cut on jacks for this pitch.
3. One-half pitch roof.  
 17 in. shorter when spaced 12 in. on center.  
 22.6 in. shorter when spaced 16 in. on center.  
 34 in. shorter when spaced 24 in. on center.  
 12 and 17 gives the side cut on jacks for this pitch roof.

## SHINGLING

### To Find the Number of Shingles Required to Cover 100 Square Feet or One Square

Deduct 3 inches from length of shingle, divide the remainder by three, the result is the exposed length of shingles.

One square equals 14,400 square inches. Divide this number by the exposed surface; equals the required number of shingles.

Note—A shingle is 4 inches wide and of various lengths, as 15, 18, 21, 24, 27 inches.

### Table for Estimating Shingles

Length Shingle	Exposed to weather	Sq. ft. covered by 1,000 shingles		Shingles for 100 sq. ft.	
		4 in. Wide	6 in. Wide	4 in. Wide	6 in. Wide
15	4	111	167	900	600
18	5	139	208	720	480
21	6	167	250	600	400
24	7	194	291	514	343
27	8	222	333	450	300

## To Find the Number of Shingles Required for a Roof

Multiply the length of ridge pole by twice the length of one rafter. This gives you the number of square feet in roof. If exposed  $4\frac{1}{2}$  inches to weather, multiply square feet by nine, but if exposed 5 inches to weather, multiply square feet by eight.

Note—(a) Shingles are put up in two kinds of bundles, a 250 and a 200 bunch.

(b) 1 M shingles weigh about 250 lbs.

(c) 5 lbs. shingle nails will fasten 1 M shingles on a roof.

## LATH

Lath are of two lengths, 48 inches and 32 inches. The following estimates are based on the 48-inch lathing, which are 4 feet long,  $1\frac{1}{2}$  inches wide, which covers an area of 72 square inches. Obtain the number of square yards in building, which multiply by 15, the number required to cover one square yard. Eleven (11) lbs. of nails are required to put on 1,000 laths.

## HOW TO FIGURE PLASTERING

Multiply the distance around the room by the height of room, then for the ceiling multiply the length of room in feet by the width of room in feet. Add the two products and divide by nine, which gives you the number of square yards.

Multiply the number of yards by the price per square yard; equals the total price.

Mixtures—Six to eight bushels of lime and 40 cubic feet sharp sand,  $1\frac{1}{2}$  bushels of hair will plaster 100 square yards with two coats of mortar.

To every bushel of lime, estimate about  $\frac{5}{8}$  cubic yards (17) sand for plastering. One-third barrel of stucco will hard finish 100 square yards of plastering.

Two bushels of lime will white coat 100 square yards of wall.

## NUMBER OF NAILS REQUIRED IN CARPENTRY WORK

To case a door, 1 lb. of nails are required.

To case a window, 1 lb. of nails are required.

To put on rafters, joists and studding, etc., 3 lbs. to the 1,000 feet.



To lay a 6-inch pine floor, 15 lbs. to the 1,000 feet.

To find side of square that will inscribe in a given circle, multiply diameter by .7071.

To find the capacity of a square tank or cistern, multiply the number of cubic feet by  $7\frac{1}{2}$  (or 7.48) and the result will be in gallons.

To find contents of cistern or tank, multiply the square of the mean diameter by the depth (all in feet) and this product by  $5\frac{7}{8}$ , the result will be in gallons.

One-fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching.

To measure square timbers, multiply the length, width and thickness together and divide the product by 12.



### NUMBER OF NAILS PER POUND

Size	Length and Gauge	Approx.
		No. to Lb.
2d	1 inch No. 15	876
3d	$1\frac{1}{4}$ inch No. 14	568
4d	$1\frac{1}{2}$ inch No. $12\frac{1}{2}$	316
5d	$1\frac{3}{4}$ inch No. $12\frac{1}{2}$	271
6d	2 inch No. $11\frac{1}{2}$	181
7d	$2\frac{1}{4}$ inch No. $11\frac{1}{2}$	161
8d	$2\frac{1}{2}$ inch No. $10\frac{1}{4}$	106
9d	$2\frac{3}{4}$ inch No. $10\frac{1}{4}$	96
10d	3 inch No. 9	69
12d	$3\frac{1}{4}$ inch No. 9	63
16d	$3\frac{1}{2}$ inch No. 8	49
20d	4 inch No. 6	31
30d	$4\frac{1}{2}$ inch No. 5	24
40d	5 inch No. 4	18
50d	$5\frac{1}{2}$ inch No. 3	14
60d	6 inch No. 2	11

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Month\_\_\_\_\_

Job at\_\_\_\_\_

Contractor\_\_\_\_\_

Date		Hours	Rate	Amount	
Sun.					
Mon.					
Tues.					
Wed.					
Thur.					
Fri.					
Sat.					
Total					

**Mr. Happy Man Says—"An insurance policy  
(against hard work) with each ATKINS Saw."**



Month\_\_\_\_\_

Job at\_\_\_\_\_

Contractor\_\_\_\_\_

Date		Hours	Rate	Amount	
Sun.					
Mon.					
Tues.					
Wed.					
Thur.					
Fri.					
Sat.					
Total					

**Mr. Happy Man Says—"You have to file an  
ATKINS Saw once in awhile—but not often."**

Month \_\_\_\_\_

Job at \_\_\_\_\_

Contractor \_\_\_\_\_

Date		Hours	Rate	Amount	
Sun.					
Mon.					
Tues.					
Wed.					
Thur.					
Fri.					
Sat.					
Total					

**Mr. Happy Man Says—"If you had as good teeth and temper as an Atkins Saw, you'd cut up more."**

Month \_\_\_\_\_

Job at \_\_\_\_\_

Contractor \_\_\_\_\_

Date		Hours	Rate	Amount	
Sun.					
Mon.					
Tues.					
Wed.					
Thur.					
Fri.					
Sat.					
Total					

**Mr. Happy Man Says—"Sharp saws made by  
Saw sharps—Atkins."**

# CARPENTER'S TABLE OF WAGES

HOURS	Rate per Hr.	Reg. Time	Over Time	Dbl. Time	Rate per Hr.	Reg. Time	Over Time	Dbl. Time	Rate per Hr.	Reg. Time	Over Time	Dbl. Time	Rate per Hr.	Reg. Time	Over Time	Dbl. Time	Rate per Hr.	Reg. Time	Over Time	Dbl. Time
1	\$0 65	\$0 32½	\$0 48½	\$0 65	\$0 75	\$0 37½	\$0 56½	\$0 75	\$0 85	\$0 42½	\$0 63½	\$0 85	\$0 95	\$0 47½	\$0 71½	\$0 95	\$1 05	\$0 52½	\$0 78½	\$1 05
1½	65	65	97½	1 30	75	75	1 12½	1 50	85	85	1 27½	1 70	95	95	1 42½	1 90	1 05	1 05	1 57½	2 10
2	65	1 30	1 95	2 60	75	1 50	2 25	3 00	85	1 70	2 55	3 40	95	1 90	2 85	3 80	1 05	2 10	3 15	4 20
3	65	1 95	2 92½	3 90	75	2 25	3 37½	4 50	85	2 55	3 82½	5 10	95	2 85	4 27½	5 70	1 05	3 15	4 72½	6 30
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7	65	4 55	6 82½	9 10	75	5 25	7 87½	10 50	85	5 95	8 92½	11 90	95	6 65	9 97½	13 30	1 05	7 35	11 02½	14 70
8	65	5 20	7 80	10 40	75	6 00	9 00	12 00	85	6 80	10 20	13 60	95	7 60	11 40	15 20	1 05	8 40	12 60	16 80
9	65	5 85	8 77½	11 70	75	6 75	10 12½	13 50	85	7 65	11 47½	15 30	95	8 55	12 82½	17 10	1 05	9 45	14 17½	18 90
10	65	6 50	9 75	13 00	75	7 50	11 25	15 00	85	8 50	12 75	17 00	95	9 50	14 25	19 00	1 05	10 50	15 75	21 00
1½	\$0 70	\$0 35	\$0 52½	\$0 70	\$0 80	\$0 40	\$0 60	\$0 80	\$0 90	\$0 45	\$0 67½	\$0 90	\$1 00	\$0 50	\$0 75	\$1 00	\$1 10	\$0 55	\$0 82½	\$1 10
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2	70	1 40	2 10	2 80	80	1 60	2 40	3 20	90	1 80	2 70	3 60	1 00	2 00	3 00	4 00	1 10	2 20	3 30	4 40
3	70	2 10	3 15	4 20	80	2 40	3 60	4 80	90	2 70	4 05	5 40	1 00	3 00	4 50	6 00	1 10	3 30	4 95	6 60
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4½	70	3 50	5 25	7 00	80	4 00	6 00	8 00	90	4 50	6 75	9 00	1 00	5 00	7 50	10 00	1 10	5 50	8 25	11 00
5	70	4 20	6 30	8 40	80	4 80	7 20	9 60	90	5 40	8 10	10 80	1 00	6 00	9 00	12 00	1 10	6 60	9 90	13 20
6	70	4 90	7 35	9 80	80	5 60	8 40	11 20	90	6 30	9 45	12 60	1 00	7 00	10 50	14 00	1 10	7 70	11 55	15 40
7	70	5 60	8 40	11 20	80	6 40	9 60	12 80	90	7 20	10 80	14 40	1 00	8 00	12 00	16 00	1 10	8 80	13 20	17 60
8	70	6 30	9 45	12 60	80	7 20	10 80	14 40	90	8 10	12 15	16 20	1 00	9 00	13 50	18 00	1 10	9 90	14 85	19 80
10	70	7 00	10 50	14 00	80	8 00	12 00	16 00	90	9 00	13 50	18 00	1 00	10 00	15 00	20 00	1 10	11 00	16 50	22 00



## HOURS

	Rate per Hr.	Reg. Time	Over Time	Dbl. Time	Rate per Hr.	Reg. Time	Over Time	Dbl. Time	Rate per Hr.	Reg. Time	Over Time	Dbl. Time	Rate per Hr.	Reg. Time	Over Time	Dbl. Time
1	\$1 15	\$0 57 $\frac{1}{2}$	\$0 86 $\frac{1}{2}$	\$1 15	\$1 25	\$0 62 $\frac{1}{2}$	\$0 93 $\frac{1}{2}$	\$1 25	\$1 35	\$0 67 $\frac{1}{2}$	\$1 01	\$1 35	\$1 45	\$0 72 $\frac{1}{2}$	\$1 09	\$1 45
1	1 15	1 15	1 72 $\frac{1}{2}$	2 30	1 25	1 25	1 87 $\frac{1}{2}$	2 50	1 35	1 35	2 02 $\frac{1}{2}$	2 70	1 45	1 45	2 17 $\frac{1}{2}$	2 90
2	1 15	2 30	3 45	4 60	1 25	2 50	3 75	5 00	1 35	2 70	4 05	5 40	1 45	2 90	4 35	5 80
2	1 15	3 45	5 17 $\frac{1}{2}$	6 90	1 25	3 75	5 62 $\frac{1}{2}$	7 50	1 35	4 05	6 07 $\frac{1}{2}$	8 10	1 45	4 35	6 52 $\frac{1}{2}$	8 70
3	1 15	4 60	6 90	9 20	1 25	5 00	7 50	10 00	1 35	5 40	8 10	10 80	1 45	5 80	8 70	11 60
4	1 15	5 75	8 62 $\frac{1}{2}$	11 50	1 25	6 25	9 37 $\frac{1}{2}$	12 50	1 35	6 75	10 12 $\frac{1}{2}$	13 50	1 45	7 25	10 87 $\frac{1}{2}$	14 50
5	1 15	6 90	10 35	13 80	1 25	7 50	11 25	15 00	1 35	8 10	12 15	16 20	1 45	8 70	13 05	17 40
6	1 15	8 05	12 07 $\frac{1}{2}$	16 10	1 25	8 75	13 12 $\frac{1}{2}$	17 50	1 35	9 45	14 17 $\frac{1}{2}$	18 90	1 45	10 15	15 22 $\frac{1}{2}$	20 30
7	1 15	9 20	13 80	18 40	1 25	10 00	15 00	20 00	1 35	10 80	16 20	21 60	1 45	11 60	17 40	23 20
8	1 15	10 35	15 52 $\frac{1}{2}$	20 70	1 25	11 25	16 87 $\frac{1}{2}$	22 50	1 35	12 15	18 22 $\frac{1}{2}$	24 30	1 45	13 05	19 57 $\frac{1}{2}$	26 10
9	1 15	11 50	17 25	23 00	1 25	12 50	18 75	25 00	1 35	13 50	20 25	27 00	1 45	14 50	21 75	29 00
10	\$1 20	\$0 60	\$0 90	\$1 20	\$1 30	\$0 65	\$0 97 $\frac{1}{2}$	\$1 30	\$1 40	\$0 70	\$1 05	\$1 40	\$1 50	\$0 75	\$1 12 $\frac{1}{2}$	\$1 50
1	1 20	1 20	1 80	2 40	1 30	1 30	1 95	2 60	1 40	1 40	2 10	2 80	1 50	1 50	2 25	3 00
2	1 20	2 40	3 60	4 80	1 30	2 60	3 90	5 20	1 40	2 80	4 20	5 60	1 50	3 00	4 50	6 00
2	1 20	3 60	5 40	7 20	1 30	3 90	5 85	7 80	1 40	4 40	6 30	8 40	1 50	4 50	6 75	9 00
3	1 20	4 80	7 20	9 60	1 30	5 20	7 80	10 40	1 40	5 60	8 40	11 20	1 50	6 00	9 00	12 00
4	1 20	6 00	9 00	12 00	1 30	6 50	9 75	13 00	1 40	7 00	10 50	14 00	1 50	7 50	11 25	15 00
5	1 20	7 20	10 80	14 40	1 30	7 80	11 70	15 60	1 40	8 40	12 60	16 80	1 50	9 00	13 50	18 00
6	1 20	8 40	12 60	16 80	1 30	9 10	13 65	18 20	1 40	9 80	14 70	19 60	1 50	10 50	15 75	21 00
7	1 20	9 60	14 40	19 20	1 30	10 40	15 60	20 80	1 40	11 20	16 80	22 40	1 50	12 00	18 00	24 00
8	1 20	10 80	16 20	21 60	1 30	11 70	17 55	23 40	1 40	12 60	18 90	25 20	1 50	13 50	20 25	27 00
9	1 20	12 00	18 00	24 00	1 30	13 00	19 50	26 00	1 40	14 00	21 00	28 00	1 50	15 00	22 50	30 00
10																

10

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1	\$1 65	\$0 82½	\$1 24	\$1 65	\$1 70	\$0 85	\$1 27½	\$1 70	\$1 75	\$0 87½	\$1 31	\$1 75	\$1 80	\$0 90	\$1 35	\$1 80
2	1 65	1 65	2 47½	3 30	1 70	1 70	2 55	3 40	1 75	1 75	2 62½	3 50	1 80	1 80	2 70	3 60
3	1 65	3 30	4 95	6 60	1 70	3 40	5 10	6 80	1 80	3 50	5 25	7 00	1 80	3 60	5 40	7 20
4	1 65	4 95	7 42½	9 90	1 70	5 10	7 65	10 20	1 75	5 25	7 87½	10 50	1 80	5 40	8 10	10 80
5	1 65	6 60	9 90	13 20	1 70	6 80	10 20	13 60	1 75	7 00	10 50	14 00	1 80	7 20	10 80	14 40
6	1 65	8 25	12 37½	16 50	1 70	8 50	12 75	17 00	1 80	8 75	13 12½	17 50	1 80	9 00	13 50	18 00
7	1 65	9 90	14 85	19 80	1 70	10 20	15 30	20 40	1 75	10 25	15 75	21 00	1 80	10 80	16 20	21 60
8	1 65	11 55	17 32½	23 10	1 70	11 90	17 85	23 80	1 75	12 55	18 37½	24 50	1 80	12 60	18 90	25 20
9	1 65	13 20	19 80	26 40	1 70	13 60	20 40	27 20	1 75	14 00	21 00	28 00	1 80	14 40	21 60	28 80
10	1 65	14 85	22 27½	29 70	1 70	15 30	22 95	30 60	1 75	15 75	23 62½	31 50	1 80	16 20	24 30	32 40
	1 65	16 50	24 75	33 00	1 70	17 00	25 50	34 00	1 75	17 50	26 25	35 00	1 80	18 00	27 00	36 00

**INSTRUCTIONS:** To find the amount due you at any rate from 65c to \$1.85 per hour, find the column containing the rate you are paid and follow it down to the number of hours you have worked. Opposite is what is due you. For example: If you have worked 7½ hours at 80c per hour for 7 hours at 80c is found to be \$5.60, and ½ hour, 40c. This makes a total of \$6.00 due you for 7½ hours work at 80c per hour regular time. If you are paid regular time for 7 hours work and over time for ½ hour, 7 hours at 80c per hour, regular time, is found to be \$5.60, and ½ hour, over time, 60c. There would then be due you \$6.20.

These tables are figured at time and one-half for over time.

**E. C. ATKINS AND COMPANY**

See your hardware dealer for any  
of the ATKINS items listed below:

Back saws	Jig saws
Band saws, narrow	Keyhole saws
Butcher saws	Kitchen saws
Cane knives	Metal cutting saws
Circular saws	Mitre saws
Cement trowels	Nests of saws
Compass saws	Panel saws
Coping saws	Pattern Makers' saws
Cordwood saws	Plasterers' saws
Corn knives	Plastering trowels
Crosscut saws	Pruning saws and shears
Ditch bank blades	Plumbers' saws
Dovetail saws	Rip saws
Files	Saw filers
Flooring saws	Saw sets
Grass hooks	Scroll saws
Grinding wheels	Scrapers
Handsaws	Stairbuilders' saws
Hacksaw blades and frames	Wood saw frames and blades

**E. C. ATKINS AND COMPANY**

"The Silver Steel Saw People"

Established 1857

Home Office and Factory

**INDIANAPOLIS, INDIANA, U. S. A.**





*It pays to use*

**ATKINS**

*Silver Steel* **SAWS**